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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/925,178	08/09/2001	Craig Schweinhart	PD-200273	4192

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EXAMINER	
GANTT, ALAN T	

ART UNIT	PAPER NUMBER
2684	

DATE MAILED: 09/10/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/925,178	SCHWEINHART ET AL.	
	Examiner	Art Unit	
	Alan T. Gantt	2684	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *080901*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-65* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *See Continuation Sheet* is/are rejected.

7)☒ Claim(s) *4,5,9,12,15-18,22,25,27,29-32,36,39,43,44,48,51,56,57,61 and 64* is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

Continuation of Disposition of Claims: Claims rejected are 1-3,6-8,10,11,13,14,19-21,23,24,26,28,33-35,37,38,40--42,45-47,49,50,52-55,58-60,62,63,65.

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claims 1-3, 6-8, 10, 11, 13, 14, 19-21, 23, 24, 26, 28, 33-35, 37, 38, 40-42, 45-47, 49, 50, 52-55, 58-60, 62, 63, and 65 are rejected under 35 U.S.C. 102(e) as being anticipated by Jorgensen.

Regarding claim 1, Jorgensen discloses a transmission control protocol/Internet protocol (TCP/IP) packet-centric wireless point-to-multipoint transmission system architecture that applies to several communication networks, including satellite systems (paragraph 0009). Jorgensen provides a method of transmitting packets that meets the following claim limitations:

receiving a packet that conforms with a predetermined protocol, (paragraph 00371)

classifying the packet based upon the predetermined protocol; (paragraphs 0008 and 0119 –TCP/IP)

selectively storing the packet into one of a plurality of prioritized queues, the one queue being of a relatively high priority, (paragraphs 0455, 0456, 0522) and

scheduling the packet for transmission over the satellite communications network according to the storing step. (paragraphs 0009, 507, 522, 544, and 0559)

Regarding 14, Jorgensen discloses a transmission control protocol/Internet protocol (TCP/IP) packet-centric wireless point-to-multipoint transmission system architecture that applies to several communication networks, including satellite systems (0009). Jorgensen provides a method of transmitting packets that includes a terminal apparatus for transmitting packets to a satellite communications system, comprising:

a plurality of queues configured to store the packets, the plurality of queues being prioritized, wherein the packets conform with a predetermined protocol, (paragraphs 008, 455, 456) and

classification logic configured to classify the packets based upon the predetermined protocol, (paragraph 0009, and 0119 –TCP/IP) wherein one of the packets is selectively stored in one of the plurality of queues, the one queue being of a relatively high priority, the one packet being scheduled for transmission over the satellite communications network according to the relative priority of the one queue. (paragraphs 0009, 486-489, 507, 522, 544, and 0559)

Regarding claim 28, Jorgensen discloses a transmission control protocol/Internet protocol (TCP/IP) packet-centric wireless point-to-multipoint transmission system architecture that

applies to several communication networks, including satellite systems (paragraph 0009). Jorgensen provides for a satellite communications system comprising:

a hub configured to control bandwidth allocations in conjunction with a satellite; (paragraphs 0009, 0208) and

a plurality of terminals configured to transmit packets (paragraph 0008), each of the terminals comprising:

a plurality of queues configured to store the packets, the plurality of queues being prioritized, (paragraphs 0455, 0456) and

classification logic configured to classify the packets based upon a predetermined protocol associated with the packets, wherein one of the packets is selectively stored in one of the plurality of queues (paragraph 0009, and 0119 – TCP/IP), the one queue being of a relatively high priority, the one packet being scheduled for transmission over the satellite communications network according to the relative priority of the one queue. (paragraphs 0009, 0486-0489, 507, 522, 544, and 0559)

Regarding, claim 40, Jorgensen discloses a transmission control protocol/Internet protocol (TCP/IP) packet-centric wireless point-to-multipoint transmission system architecture that applies to several communication networks, including satellite systems (0009). Jorgensen provides a method of transmitting packets and subsequently a terminal apparatus for transmitting packets to a satellite communications system, comprising:

means for receiving a packet that conforms with a predetermined protocol; (paragraph 0371)

means for classifying the packet based upon the predetermined protocol, (paragraphs 0008 and 0119 –TCP/IP)

means for selectively storing the packet into one of a plurality of prioritized queues, the one queue being of a relatively high priority; (paragraphs 0455, 0456, 0522) and

means for scheduling the packet for transmission over the satellite communications network according to priority level of the one queue. (paragraphs 0009, 507, 522, 544, and 0559)

Regarding claim 53, Jorgensen discloses a transmission control protocol/Internet protocol (TCP/IP) packet-centric wireless point-to-multipoint transmission system architecture and that applies to several communication networks, including satellite systems (0009). Thus, Jorgensen, inherently, provides a computer-readable medium carrying one or more sequences of one or more instructions for transmitting packets via a terminal over a satellite communications network, the one or more sequences of one or more instructions including instructions which, when executed by one or more processors, cause the one or more processors to perform the steps of:

receiving a packet that conforms with a predetermined protocol, (paragraph 0371)

classifying the packet based upon the predetermined protocol; (paragraph 0008 and 0119 – TCP/IP)

selectively storing the packet into one of a plurality of prioritized queues, the one queue being of a relatively high priority; (paragraphs 0455, 0456, 0522) and

scheduling the packet for transmission over the satellite communications network according to the storing step. (paragraphs 0009, 507, 522, 544, and 0559)

Regarding 2, 41, and 54, Jorgensen meets the following limitation - The method according to Claim 1, wherein the predetermined protocol is a transport layer protocol, the method further comprising:

determining whether the packet corresponds to an initial message in a message flow; (paragraph 0473 first sentence) and

selectively compressing the packet to reduce header information in response to the determining step. (paragraphs 335, 448 Jorgensen utilizes compression)

Regarding 3, 42, and 55, Jorgensen meets the following limitation - wherein the transport layer protocol is TCP (Transmission Control Protocol), the message flow in the determining step includes Hyper Text Transfer Protocol (HTTP) messages. (paragraph 0074 and 0153 – HTTP allowed)

Regarding 6, 19, 33, 45, and 58, Jorgensen meets the following limitation - further comprising transmitting the packet over a contention channel of the satellite communications network. (paragraphs 440-444)

Regarding 7, 20, 46, 34, and 59, Jorgensen meets the following limitation - further comprising storing header information associated with the packet at a remote terminal. (paragraph 525)

Regarding 8, 21, 35, 47, and 60, Jorgensen meets the following limitation - further comprising determining whether a threshold of the one queue has been exceeded; and redirecting the packet to another one of the priority queues, the one queue being of a higher priority than the other queue. (paragraph 559)

Regarding 10, 23, 37, 49, and 62, Jorgensen meets the following limitation - wherein the plurality of queues in the transmitting step is prioritized using a weighting scheme that is based upon user services. (paragraphs 113 and 138)

Regarding claims 11, 24, 38, 50, and 63, Jorgensen meets the following limitation - further comprising servicing the plurality of queues according to a schedule plan to selectively forward the packet to an uplink channel of the satellite communications network. (paragraphs 522, 544, 555, and 559)

Regarding claims 13, 26, 52, and 65, Jorgensen meets the following limitation - further comprising spoofing a source host in response to the receiving step, the source host originating the packet. (paragraphs 580 and 589)

Allowable Subject Matter

3. Claims 4, 5, 9, 12, 15-18, 22, 25, 27, 29-32, 36, 39, 43, 44, 48, 51, 56, 57, 61 and 64 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

The following is a statement of reasons for the indication of allowable subject matter: Regarding the above claims, these claims differentiate applicant's invention from Jorgensen and other prior art, especially elimination of header information from the packet, classifying corresponding to connection oriented service and connectionless service allocating and selectively preempting the packet transmission opportunity, etc.

Conclusion

4. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Dravida et al. discloses a broadband system having routing identification based switching.

Welin discloses systems, processes, and integrated circuits for improved packet scheduling of media over packet.

Ofek discloses a method of transmitting and forwarding data packets over packet switching and shared media networks.

Any inquiry concerning this communication from the examiner should be addressed to Alan Gantt at telephone number (703) 305-0077. The examiner can normally be reached between 9:30 AM and 6 PM within the Eastern Time Zone. The group FAX number is (703) 872-9306.

Any inquiry of a general nature or relating to this application should be directed to the group receptionist at telephone number (703) 305-4700.

Alan T. Gantt

Alan T. Gantt

September 4, 2004

NICK CORSARO
PRIMARY EXAMINER